

CLAIMS

1. Bed plane with improved structure, comprising a plurality of slats, arranged transversally at at least one portion of frame (10) of the bed and connected to it through slat-holders, characterised in that a series of stems or pistons (11) are foreseen, each connected with one or more of said slats and associated with at least one respective elastic sliding element (12), each stem or piston (11) being fixed to at least one first pulley or sliding guide (15) for the transmission of motion, which occurs thanks to the interposition of flexible members (16), such as cords, belts, chains and/or cables, connected to the frame (10) of the bed plane, so that said stems or pistons (11) react to the pressures exerted by the body lying down on the bed plane, compensating for the sinking created by the heaviest parts of the body, i.e. those parts between the shoulders and the pelvis, with an upward thrust, supporting the lighter parts, in other words the back and kidneys.

2. Bed plane with improved structure according to claim 1, characterised in that said frame (10) comprises a central bearing body, from which said stems or pistons (11) project and at the top end of which the slats are connected, through balancing joints, said slats being arranged transversally to the plane, which usually

consist the support for the mattress.

3. Bed plane with improved structure according to claim 1, characterised in that said stems or pistons (11) are connected at the top to a support beam, in turn
5 connected, through balancing joints, to a pair of flexible slats.

4. Bed plane with improved structure according to claim 1, characterised in that each stem or piston (11) has a vertical excursion, which allows the bed plane to adapt
10 to the anatomy of the body, independently of the weight and configuration of the person lying down on it, so that the lowering of one or more slats or portions thereof corresponds to the raising of other slats of the bed plane.

15 5. Bed plane with improved structure according to claim 1, characterised in that said frame (10) is of the perimetric type, in which the slats are contained inside the frame (10) itself, or rather said frame (10) is constructed in an underlying position and is smaller
20 in size than the slats and in which the slats define the perimeter of the bed plane.

6. Bed plane with improved structure according to claim 1, characterised in that further pulleys or sliding guides (17) for the transmission of motion are
25 foreseen, each of which is fixed to the top end (13) of the frame (10) and is arranged, at a predetermined

distance, between one stem (11) and the next.

7. Bed plane with improved structure according to claim 1, characterised in that said stems or pistons (11) are arranged in a central portion of the frame (10) and/or
5 of the bed plane.

8. Bed plane with improved structure according to claim 1, characterised in that said bed plane has articulated portions (10A, 10B).